## **APPENDIX IV**

LAND USE/LAND COVER	AREAS IN HUC-10 SUBWATERSHEDS (ACRES)					
	01	02	03	04		
Deciduous Forest	50,628	5,900	12,740	8,512		
Evergreen Forest	4,220	581	875	699		
High Intensity:						
Commercial/Industrial/Transportation	567	378	454	1,969		
High Intensity: Residential	932	365	344	1,200		
Low Intensity: Residential	4,127	1,816	2,315	2,967		
Mixed Forest	11,712	3,859	4,996	4,745		
Open Water	980	2,407	1,503	2,346		
Other Grasses:						
Urban/Recreational	101	110	226	378		
Pasture/Hay	40,031	43,856	62,015	35,299		
Row Crops	47,893	68,861	63,405	75,029		
Transitional	274	81	64	211		
Woody Wetlands	7,381	11,552	6,719	11,029		
Small Grains	1,357	427		70		
Bare Rock/Sand/Clay		48		12		
Quarries/Strip Mines	122					
Total	170,324	140,242	155,668	144,465		

Table A4-1. Land Use Distribution in North Fork Forked Deer River Watershed by HUC-10. Data are from 1992 Multi-Resolution Land Characterization (MRLC) derived by applying a generalized Anderson Level II system to mosaics of Landsat thematic mapper images collected every five years.

## **HYDROLOGIC SOIL GROUPS**

**GROUP A SOILS** have low runoff potential and high infiltration rates even when wet. They consist chiefly of sand and gravel and are well to excessively drained.

**GROUP B SOILS** have moderate infiltration rates when wet and consist chiefly of soils that are moderately deep to deep, moderately to well drained, and moderately coarse to coarse textures.

**GROUP C SOILS** have low infiltration rates when wet and consist chiefly of soils having a layer that impedes downward movement of water with moderately fine to fine texture.

**GROUP D SOILS** have high runoff potential, very low infiltration rates, and consist chiefly of clay soils.

Table A4-2. Hydrologic Soil Groups in Tennessee as Described in WCS.

STATION	HUC-10	AGENCY	NAME	AREA (SQ MILES)	LOW	/ FLOW (	CFS)
		-		(	1Q10	7Q10	3Q20
07028900	0801020401	USGS	Middle Fork Forked Deer River	88.2	3.88	4.23	3.48
07028930	0801020401	USGS	Turkey Creek				
07028940	0801020401	USGS	Turkey Creek				
07028935	0801020401	USGS	Trib to Turkey Creek				
07028950	0801020401	USGS	Turkey Creek	13.3			0
FM111	0801020401	USACOE	Middle Fork Forked Deer River				
07029000	0801020402	USGS	Middle Fork Forked Deer River	369	75.2	77.0	72.8
07028985	0801020402	USGS	Trib to Middle Fork Forked Deer				
07028500	0801020403	USGS	North Fork Forked Deer River	73.4	7.12	7.46	6.25
07028700	0801020403	USGS	Cain Creek				
07028600	0801020403	USGS	Trib to Cain Creek	0.95			0
07028540	0801020403	USGS	Cain Creek				
07029090	0801020404	USGS	Lewis Creek 25.5				0
FN111	0801020404	USACOE	North Fork Forked Deer River				
07029100	0801020404	USGS	North Fork Forked Deer River	867	86.4	96.2	81.6
07029050	0801020404	USGS	Nash Creek	7.23			0

Table A4-3. Historical Streamflow Data Summary Based on Mean Daily Flows in North Fork Forked Deer River Watershed. USGS, United States Geological Survey; USACOE, United States Army Corps of Engineers.

PARAMETER	SUBWATERSHED				
	01	02	03	04	
E. coli	A	D, G	K, N	P, Q, S, V	
Fecal Coliform	A	G G	K, N	P, Q, S, T, U, V	
Fecal Streptococcus		-	13, 13	T	
Enterococcus		G	K,N	Q, S, V	
Enterococcus		G	N,IN	Q, S, V	
Acidity				U	
Alkalinity (Total)	Α	D.C	IZ NI		
,	A	D, G	K, N	P, Q, S, T, U, V V	
BOD <sub>5</sub>		<u> </u>	IZ NI		
BOD (C)	_	D	K, N	P, Q, S	
Color (Apparent)	Α				
Color (True)	Α	D 0	14. 11	D 0 0 T 11 1/	
Conductivity (Field)	Α	D, G	K, N	P, Q, S, T, U, V	
DO	Α	D, G	K, N	P, Q, S, T, U, V	
Flow	Α				
Hardness (Total)	Α	D, G	K, N	P, Q, S, U, V	
pH (Field)	Α	D, G	K, N	P, Q, S, T, U, V	
pH (Lab)				U	
Residue (Dissolved)	Α	G	K, N	Q, S, V	
Residue (Settlable)		D	K, N	P, Q, S, T, U, V	
Residue (Suspended)	Α	D, G	K, N	P, Q, S, T, U, V	
Residue (Total)				Т	
Temperature	Α	D, G	K, N	P, Q, S, T, U, V	
Turbidity	Α	G	K, N	Q, S, V	
_					
Biorecon	Α				
RBP III	Α				
Ammonia N	Α	D, G	K, N	P, Q, S, T, U, V	
As	Α	D, G	K, N	P, Q, S, T, U, V	
Ca		, -	,	V	
Cd	Α	D, G	K, N	P, Q, S, T, U, V	
Cr (Total)	Α	D, G	K, N	P, Q, S, T, U, V	
Cu	Α	D, G	K, N	P, Q, S, T, U, V	
Fe	A	D, G	K, N	P, Q, S, T, V	
Hg	A	, D, O	13,13	T, U, V	
Mg				T T	
Mn	Α	D, G	K, N	P, Q, S, T, U, V	
N (Total Kjeldahl)	A	G G	K, N	Q, S, V	
Ni	A	G	rx, rx	T, U, V	
NO <sub>2</sub> +NO <sub>3</sub>	A		IZ NI	P, Q, S, T, U, V	
		D, G	K, N	1	
P (Total)	A	D, G	K, N	P, Q, S, T, U, V	
Pb	A	D, G	K, N	P, Q, S, T, U, V	
Se	-			U	
SO <sub>4</sub>			17.31	U	
TOC	A	G	K, N	Q, S, V	
Zn	Α	D	K, N	P, Q, S, T, U, V	

Table A4-4a. Water Quality Parameters Monitored in the North Fork Forked Deer River Watershed. Codes are described in Table 4-4b.

CODE	STATION	ALIAS	AGENCY	LOCATION
Α	ECO65E06		TDEC	Griffen Creek
В	MDFKFKDEER30.5		TDEC	Middle Fork Forked Deer River @ RM 30.5
С	MDFKFKDEER49.5		TDEC	Middle Fork Forked Deer River @ RM 49.5
D	BIRDS007.4BN		TDEC	Birdsong Creek @ RM 7.4
Е	MFFDE023.4GI	HUMBOLDTSTP01	TDEC	Middle Fork Forked Deer River @ RM 23.4
F	001853		TDEC	Middle Fork Forked Deer River @ RM 14.6
G	BUCK001.2GI		TDEC	Buck Creek @ RM 1.2
Н	MDFKFKDEER05.2		TDEC	Middle Fork Forked Deer River @ RM 5.2
I	MDFKFKDEER07.0		TDEC	Middle Fork Forked Deer River @ RM 7.0
J	MDFKFKDEER21.5		TDEC	Middle Fork Forked Deer River @ RM 21.5
K	DOAKV002.0DY		TDEC	Doakville Creek @ RM 2.0
L	MND002.1GI		TDEC	Mud Creek @ RM 2.1
М	NFFDE036.8		TDEC	North Fork Forked Deer River @ RM 36.8
N	NFFDE020.5DY	001852	TDEC	North Fork Forked Deer River @ RM 20.5
0	NFKFKDEER36.5		TDEC	North Fork Forked Deer River @ RM 36.5
Р	MCCOOL1HY	MCCOOL1	TDEC	McCool Lake #1
Q	LEWIS004.4HY		TDEC	Lewis Creek @ RM 4.4
R	NFFDE002.2DY	001854	TDEC	North Fork Forked Deer River @ RM 2.2
S	NFFDE022.8DY		TDEC	North Fork Forked Deer River @ RM 22.8
T	001970		TDEC	North Fork Forked Deer River @ RM 6.8
U	NFKFKDEER04.0		TDEC	North Fork Forked Deer River @ RM 4.0
V	NFFD007.3DY	NFKFKDEER07.3	TDEC	North Fork Forked Deer River @ RM 7.3

Table A4-4b. Water Quality Monitoring Stations in the North Fork Forked Deer River Watershed. TDEC, Tennessee Department of Environment and Conservation; USGS, United States Geologic Survey; TVA, Tennessee Valley Authority; NPS, National Park Service.

FACILITY						
NUMBER	FACILITY NAME	SIC	SIC NAME	MADI	WATERBODY	HUC-10
					Unnamed Trib to Johnson	
TN0023264	Nova School	4952	Sewerage System	Minor	Creek @ RM 4.4	0801020401
					Unnamed Trib	
TN0056481	East Elementary School	4952	Sewerage System	Minor	to MFFD @ RM 35.1	0801020401
			Steel Works, Blast		Dyer Creek	
			Furnaces and		@ RM 1.5, Unnamed Trib	
TN0074811	Ameristeel	3312	Rolling Mills	Minor	to MFFD @ RM 32.5	0801020401
TN0075876	Middle Fork STP	4952	Sewerage System	Major	MFFD @ RM 29.1	0801020401
	Humboldt Board of					
TN0062588	Public Utilities STP	4952	Sewerage System	Major	MFFD @ RM 23.4	0801020402
TN0021750	Trenton Lagoon	4952	Sewerage System	Minor	NFFD @ RM 35.9	0801020403
	Heckethorn		Ordinance and		Unnamed Trib to Old	
TN0000027	Manufacturing	3489	Accessories	Minor	Channel NFFD @ RM 1.3	0801020404
			Fabricated Rubber		Unnamed Trib	
TN0000221	PolyOne Elastomers	3069	Products	Minor	to NFFD @ RM 6.2	0801020404
			Bottled and			
	Dr. Pepper Pepsi-Cola		Canned Soft		Unnmaed Trib to Pond	
TN0064017	Bottling Company	2086	Drinks	Minor	Creek @ RM 1.2	0801020404
	Trunkline Gas Company		Natural Gas		Unnamed Trib to Nash	
TN0072966	(Dyersburg Compressor)	4922	Transmission	Minor	Creek @ RM 3.0	0801020404

Table A4-5. Active Permitted Point Source Facilities in the North Fork Forked Deer River Watershed. SIC, Standard Industrial Classification; MADI, Major Discharge Indicator; WWC, Wet Weather Conveyance.

FACILITY NUMBER	PERMITEE	SIC	SIC NAME	WATERBODY	HUC-10
			Construction Sand		
TN0071072	Ford Construction Co.	1442	and Gravel	Light Creek	0801020404
	Memphis Stone and		Construction Sand	Unnamed Trib	
TN0066419	Gravel Company	1442	and Gravel	to Jones Creek	0801020404

Table A4-6. Active Permitted Mining Sites in the North Fork Forked Deer River Watershed. SIC, Standard Industrial Classification.

FACILITY					
NUMBER	FACILITY NAME	SECTOR	RECEIVING STREAM	AREA*	HUC-10
			Unnamed Trib		
TNR050189	Ace Trucking Company	Р	to Johnson Creek	6.0	0801020401
TNR050553	AmeriSteel Corporation	F, N, AD, L	Unnamed Trib to MFFD	290.0	0801020401
TNR051052	Chicago Metallic Products	AA		12.1	0801020401
TNR051260	Waste Management of TN	Р	Dyer Creek	3.5	0801020401
TNR051362	Porter-Cable Corporation	AB	MFFD	69.5	0801020401
TNR051444	Consolidated Freightways	Р		5.0	0801020401
TNR051725	Con-Way Southern Express	Р	Little Sugar Creek	1.0	0801020401
TNR051965	Delta Faucet Company	AA	Dyer Creek	9.0	0801020401
TNR052040	Dement Construction Co.	D	Dyer Creek	16.0	0801020401
TNR053017	Jackson Wilburt Burial Vault	E	MFFD	3.7	0801020401
			Unnamed Trib		
TNR053060	AEMP Corporation	AA, F	to Dyer Creek	80.0	0801020401
		_	Unnamed Trib		
TNR053246	Milan Express Company	Р	to Jones Creek	8.0	0801020401
TNR050001	Emerson Hermetic Motor	AC	MFFD	21.7	0801020402
TNR050075	DENSO Manufacturing	AC, AB	Laural Bank Branch	143.5	0801020402
			Lick Creek	1	
TNR050164	J. Hungerford Smith	U	Ditch to Lick Creek	3.5	0801020402
TNR050586	Dana Corporation	AB	MFFD	55.7	0801020402
TNR050663	J&P Auto salvage	M	Reagan Creek	1.5	0801020402
			Intermittent Stream		
TNR051648	General Metals Products	AA	to MFFD	20.5	0801020402
TNR053282	Jones Companies	V	Humboldt Storm Sewer	15.0	0801020402
TNR053284	Jones Companies	V	Humboldt Storm Sewer	4.0	0801020402
TNR053285	Jones Companies	V	Humboldt Storm Sewer	10.0	0801020402
TNR053286	Jones Companies	V	Humboldt Storm Sewer	5.0	0801020402
TNR054043	American Woodwork Corp.	W	MFFD	25.0	0801020402
TNR054110	C&C Enterprises	N	Duffy's Branch	1.0	0801020402
TNR050285	TB Woods Incorporated	AB	Cain Creek	13.0	0801020403
TNR050349	Milan Seating Systems	Y, W, AB	Wolf Creek	18.5	0801020403
TNR051353	El Dorado Chemical Co.	С	Forked Deer River	3.0	0801020403
TNR051490	Windsor Forestry Tools	AA	Sand Creek	2.8	0801020403
TNR051538	Holloway Repair Facility	Р	Reed Creek	12.0	0801020403
			Unnamed Trib		
TNR051854	CECO Door Products	AA	to Clear Creek	17.3	0801020403
TNR053292	Trenton-Gibson Co Airport	S	NFFD	104.0	0801020403
TNR054052	Highway 54 Salvage, Inc.	M	Cain Creek	22.0	0801020403
			Unnamed Trib		
TNR054394	SR Products	Y	to Harris Creek	9.9	0801020403
TNR054477	Coker's Machine Shop	AB		2.0	
TNR054587	Honeywell Consumer Products	AC	Harris Creek	23.0	0801020403
			Unnamed Trib		
TNR050241	Heckethorn Manufacturing Co.	AB	to Old Channel NFFD	38.7	0801020403
TNR050617	Bekaert Corporation	V	Lewis Creek	14.0	0801020404
TNR051292	Ford Construction Company	D	NFFD	34.0	0801020404
	Electric Research &			1	
TNR051757	Manufacturing Co. (ERMCO)	AC	Lewis Creek	8.5	0801020404

TNR053100	UPS	Р	Forked Deer	1.0	0801020404
TNR053234	Firestone Industrial Products	AA	Lewis Creek	15.2	0801020404
TNR053298	Huish Detergents, Incorporated	С	Light Creek	90.0	0801020404
			Unnamed Trib		
TR053438	Federal Express	S	to Forked Deer River	0.5	0801020404
			Unnamed Trib		
TNR053896	QW Memphis Corporation	Χ	to Hunsacker Creek	20.0	0801020404
TNR054224	Dyersburg Pallet	Α	Unnamed Trib to NFFD	2.0	0801020404
TNR054385	Impressive Manufacturing	AA	Metro Storm Sewer	2.2	0801020404
TNR054386	Bennett's, Incorporated	AB, AA	Metro Storm Sewer	0.8	0801020404
TNR054398	Excalibar Minerals	E	Lewis Creek	13.0	0801020404
TNR054579	Boss Hoss Cycles, Inc.	AB	NFFD	5.5	0801020404

**Table A4-7. Active Permitted TMSP Facilities in the North Fork Forked Deer River Watershed.** Area, acres of property associated with industrial activity. Sector details may be found I Table A4-8.

SECTOR	TMSP SECTOR NAME
Α	Timber Products Facilities
	Facilities That Manufacture Metal Products including Jewelry, Silverware
AA	and Plated Ware
	Facilities That Manufacture Transportation Equipment, Industrial
AB	or Commercial Machinery
	Facilities That Manufacture Electronic and Electrical Equipment and Components,
AC	Photographic and Optical Goods
AD	Facilities That Are Not Covered Under Sectors A Thru AC (Monitoring Required)
AE	Facilities That Are Not Covered Under Sectors A Thru AC (Monitoring Not Required)
В	Paper and Allied Products Manufacturing Facilities
С	Chemical and Allied Products Manufacturing Facilities
D	Asphalt Paving, Roofing Materials, and Lubricant Manufacturing Facilities
E	Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing Facilities
F	Primary Metals Facilities
G	Metal Mines (Ore Mining and Dressing) (RESERVED)
Н	Inactive Coal Mines and Inactive Coal Mining-Related Facilities
1	Oil or Gas Extraction Facilities
	Construction Sand and Gravel Mining and Processing and Dimension Stone Mining
J	and Quarrying Facilities
K	Hazardous Waste Treatment Storage or Disposal Facilities
L	Landfills and Land Application Sites
M	Automobile Salvage Yards
N	Scrap Recycling and Waste and Recycling Facilities
0	Steam Electric Power Generating Facilities
	Vehicle Maintenance or Equipment Cleaning areas at Motor Freight Transportation
	Facilities, Passenger Transportation Facilities, Petroleum Bulk Oil Stations and
Р	Terminals, the United States Postal Service, or Railroad Transportation Facilities
_	Vehicle Maintenance Areas and Equipment Cleaning Areas of
Q	Water Transportation Facilities
R	Ship or Boat Building and Repair Yards
	Vehicle Maintenance Areas, Equipment Cleaning Areas or From Airport Deicing
S	Operations located at Air Transportation Facilities
T	Wastewater Treatment Works
U	Food and Kindred Products Facilities
V	Textile Mills, Apparel and other Fabric Product Manufacturing Facilities
W	Furniture and Fixture Manufacturing Facilities
Χ	Printing and Platemaking Facilities
Υ	Rubber and Miscellaneous Plastic Product Manufacturing Facilities
Z	Leather Tanning and Finishing Facilities

Table A4-8. TMSP Sectors and Descriptions.

FACILITY NUMBER	PERMITEE	COUNTY	LIVESTOCK	WATERBODY	HUC-10
TNA000017	Nichols Farms, Inc.	Madison	Swine	Johnson Creek	0801020401

Table A4-9. CAFO Sites in the North Fork Forked Deer River Watershed.

LOG NUMBER	COUNTY	DESCRIPTION	WATERBODY	HUC-10
98.641	Carroll	Channel Excavation	Unnamed Trib to MFFD River	0801020401
		Box Bridge		
99.013	Gibson	Construction	Sugar Creek	0801020401
99.014	Gibson	Box Culvert	Turkey Creek	0801020401
99.137	Madison	Wetland Fill (0.66 Acre)	Unnamed Trib to MFFD River	0801020401
99.394	Madison	Bridge Construction	Moize Creek	0801020401
99.522F	Madison	Debris Removal	Unnamed Trib to Turkey Creek	0801020401
99.522G	Madison	Debris Removal	Unnamed Trib to Turkey Creek	0801020401
99.5220	Madison	Debris Removal	Dry Creek	0801020401
99.522Q	Madison	Debris Removal	Unnamed Trib to Turkey Creek	0801020401
		Old Channel		
99.450	Gibson	Maintenance	Forked Deer River	0801020402
98.100	Gibson	Impoundment	Thompson Creek	0801020403
98.222	Gibson	Box Culvert	Unnamed Trib to NFFD River	0801020403
98.223	Gibson	Box Culvert	Unnamed Trib to NFFD River	0801020403
98.224	Gibson	Box Culvert	Cow Creek	0801020403
98.225	Gibson	Box Culvert	Sand Creek	0801020403
98.226	Gibson	Box Culvert	Unnamed Trib to NFFD River	0801020403
98.227	Gibson	Box Culvert	Unnamed Trib to NFFD River	0801020403
98.228	Gibson	Box Culvert	Rogers Branch	0801020403
98.229	Gibson	Box Culvert	Unnamed Trib to NFFD River	0801020403
98.230	Gibson	Box Culvert	Cow Creek	0801020403
98.231	Gibson	Culvert	Sand Creek	0801020403
98.535	Gibson	Culvert	Unnamed Trib to Cain Creek	0801020403
98.536	Gibson	Culvert	Unnamed Trib to Cain Creek	0801020403
98.537	Gibson	Culvert	Unnamed Trib to Cain Creek	0801020403
98.538	Gibson	Culvert	Unnamed Trib to Cain Creek	0801020403
98.539	Gibson	Culvert	Unnamed Trib to Cain Creek	0801020403
98.540	Gibson	Culvert	Unnamed Trib to Cain Creek	0801020403
99.047	Lauderdale	Bridge Scour Repair	Mud Creek	0801020403
99.350	Gibson	Box Culvert Lean-out	Unnamed Trib to NFFD River	0801020403
98.649	Crockett	Debris Removal	Pond Creek	0801020404
99.131	Dyer	Impoundment	Lewis Creek, Trib to NFFD	0801020404
99.456	Dyer	Debris Removal	Hunsacker Creek	0801020404

Table A4-10. Individual ARAP Permits Issued January 1994 Through June 2000 in the North Fork Forked Deer River Watershed.